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ABSTRACT

This study shows to what extent Gloria Escamilla's "Lista de Encabezamientos de Materia," the only published Mexican subject heading list, is equivalent to the Library of Congress subject headings (LCSH). A LCSH heading sample is obtained from OCLC's Online Union Catalog. Using the EPIC search from OCLC, 1947 bibliographic records were obtained, and the topical headings appearing in those headings were compared with those in the Escamilla list. The findings show that 79% of the bibliographic records have at least one subject heading; 78% of these were topical subject headings; of the topical subject headings, 60% are found in the Escamilla list either as a near equivalent or absolute match; 2% of the headings show change in meaning; and 38% do not have any type of possible match. A list of proposed translations for those topical subject headings under the categories of near equivalence and change in meaning is given. It is noted that the Escamilla list was published in 1978, and updating of the list is recommended. (Contains 5 references.) (Author/MES)

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COMPARATIVE STUDY BETWEEN THE LISTA DE ENCABEZAMIENTOS DE MATERIA BY GLORIA ESCAMILLA AND THE LIBRARY OF CONGRESS SUBJECT HEADING LIST

A Master's Research Paper submitted to the
Kent State University School of Library and Information Science
in partial fulfillment of the requirements
for the degree Master of Library Science

by

Fernando Alvarez

May, 1993

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ABSTRACT

The study shows to what extent the Gloria Escamilla's Lista de Encabezamientos de Materia, the only one published Mexican subject heading list, is equivalent to the Library of Congress subject headings. A LCSH heading sample is obtained from OCLC's Online Union Catalog, where those headings tagged 650 with 0 as second indicator assigned by LC or by member cataloging are considered. Using the EPIC search from OCLC, 1947 bibliographic records are obtained and the topical subject headings appearing in those records are compared with those topical headings appearing in the Escamilla's list. The findings show that 79% of the bibliographic records have at least one subject heading; of the total number of subject headings 78% were topical ones, of those topical subject headings 60% are found in the Escamilla's list, 2% of the headings show change in meaning, and 38% do not have any type of possible match. A list of proposed translations is given where the author offers new possible translations for those topical subject headings under the categories of near equivalence and change in meaning. The conclusions state that 60% of the topical subject headings found in the Escamilla's list is high if one considers that the most recent edition of that list is released in 1978 and propose some possible topics for further research. The research includes several tables and appendixes.

Master's Research Paper by

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M.L.S., Kent State University, 1993

Approved by

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I dedicate this research to the memory of Juan Anaya Duarte, who gave me the opportunity to work in a library some time ago.

CHAPTER I

INTRODUCTION

The cataloging process is very expensive in Mexican libraries, because Mexico does not have bibliographic utilities like OCLC or RLIN. This means that most of the cataloging is original, i.e., the libraries' technical services have to carry out the whole cataloging process for new titles being incorporated into their holdings. Cataloging done this way causes significant backlogs in the process, slowing down the workflow.

Some Mexican libraries try to decrease their cataloging costs and backlogs by using Library of Congress cataloging records. In this copy cataloging process, libraries mainly use the National Union Catalog [NUC], MARCFiche, and/or some bibliographic utility in a CD-ROM format (Bibliofile, SuperCat, etc.).

The use of the English language in LC cataloging records and the Spanish language in Mexican libraries creates the problem that every bibliographic record must be translated. Sometimes, the modifications are reduced to translation of physical description and/or notes, minor modifications. But, in some cases, libraries have to make

major modifications; for instance, a library finds the bibliographic record in its original language but that library has a translation of it, then, changes have to be made to the title statement, physical description, series statement, notes, and subject headings.

Most of the time, libraries must translate the subject headings into Spanish. This task is accomplished most often using the Escamilla's list[1], the only systematic subject heading list published in Mexico. This list faces several deficiencies, e.g., the list has not been updated or revised since 1978 when the second edition appeared.

Objective

The copy cataloging process is so vast that this research will be limited to what extent Escamilla's is equivalent to the Library of Congress Subject Heading List.[2]

This research has the following objective: to establish to what extent the subject headings, without cross references and subdivisions, in the Escamilla's list are equivalent to their counterparts in the Library of Congress

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[1] Gloria Escamilla Gonzalez, Lista de Encabezamientos de Materia: Elaborada en el Departamento de Catalogacion de la Biblioteca Nacional de Mexico, 2nd ed. (Mexico: Universidad Nacional Autonoma de Mexico, Instituto de Investigaciones Bibliograficas, 1978)

[2] Library of Congress, Library of Congress Subject Headings, 15th ed., (Washington, D.C.: Library of Congress, Cataloging Distribution Service, 1992).

Subject Heading List.

Definition of Terms

The following definitions are taken from the ALA Glossary of Library and Information Science[3]:

Copy cataloging. The cataloging of a bibliographic item by using an existing bibliographic record and altering it as needed to fit the item in hand and to conform to local cataloging practice.

Subject heading. An access point to the bibliographic record, consisting of a word or phrase which designates the subject of the work(s) contained in the bibliographic item.

Subject heading list. A standard list of terms to be used as subject headings, either for the whole field of knowledge or for a limited subject area, including references made to and from each term, notes explaining the scope or usage of certain headings, and occasionally corresponding class numbers.

Translation. The process which renders from one language into another, or from an older form of a language into a modern form, more or less closely following the original.

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[3] Heartsill Young, ed., The ALA Glossary of Library and Information Science (Chicago: American Library Association, 1983)

CHAPTER II

DESCRIPTION OF THE LITERATURE

In reviewing the literature concerning no studies were found relating to a comparison between an English subject heading list and a Spanish one. Studies were found that reflect comparisons of other types of lists.

Several works have been reviewed and only three of them show a direct relation with the research topic. These can be categorized in two broad categories: comparisons of two different lists and adaptations into a romance language.

In the category of works related to the comparison of two different subject heading lists, the only article which describes methodology and findings is written by Thomas Nichol.[4] Nichol compares the fifth modified edition of Catholic Subject Headings with the ninth edition of LCSH. The findings report that 60% of the headings are identical or differ only through the addition of an standard subdivision, while the remaining 40% are unique to Catholic Subject Headings.

There are several works concerning the adaptation of LCSH headings into a romance language. The first one is a

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[4] W. Thomas Nichol, "Theological Subject Headings Reconsidered," Library Resources and Technical Services 29, no. 2 (April/June 1985): 180-188.

study presented by Michel Fournier[5] at the IFLA General Conference in 1982; Fournier describes a project developed by the Library of Universite Laval, Quebec, Canada, for adapting LCSH headings into the French language. In the description of the methodology, he points out that two types of headings are established: 1) headings that represent a well-defined concept and, therefore, easy to translate; and 2) headings that present some problems in the translation process. For the latter is developed a four-step method of translation: 1) to check the system of references and the LC classification schedule that represented that headings; 2) to examine the item to be cataloged; 3) to look for a definition in Webster's and compare it to a definition found in Larousse; and 4) to consult several encyclopedias in order to establish the most current term. Later he describes the procedures undertaken to establish the new headings. This includes developing precise definitions for the new headings, distinguishing between the use of French as used in France and French as used in Canada, and developing linkages of the new headings, to demonstrate how the new headings were linked to existing headings establishing 'see' and 'see also' references. At the end, Fournier states the advantages and disadvantages of these

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[5] Michel Fournier, "A Project Undertaken by the Library of the Universite Laval to Adapt the Library of Congress Subject Headings into the French Language," in 48th IFLA General Conference (Montreal: International Federation of Library Associations and Institutions, 1982).

adaptations; he points out three major disadvantages: 1) delays in the LC processes of implementing changes to the headings; 2) political, social, and economic headings reflect the official point of view of the United States; and 3) the lack of uniformity in the form chosen for a heading. The main advantage is the creation of bilingual subject indexes. He concludes that the adaptation of LCSH headings into French has been an enriching experience.

The second study is also presented at the IFLA General Conference in 1982. In this, Bertha Cardona de Gil[6] describes a Colombian project called LEMB (Lista de Encabezamientos de Materia para Bibliotecas [Subject Heading List for Libraries]). The project has the following objectives: 1) to provide libraries in Spanish speaking countries with a list of subject headings; 2) to obtain lists of subject headings by areas and special fields; 3) to design mechanisms that would ensure the updating of the list; and 4) to create a bilingual, Spanish/English, system of authorities, including subject headings and names. The methodology for this project includes the following, major steps: 1) to compare existing subject headings in different Latin American libraries with the OAS (Organization of American States) list in order to verify if the Spanish

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[6] Bertha Nelly Cardona de Gil, "Project: List of Subject Headings for Libraries (LEMB): Problems of Translation and Adaptation," in 48th IFLA General Conference (Montreal: International Federation of Library Associations and Institutions, 1982).

headings gathered from these libraries appeared in the OAS list; 2) to check these headings in the LCSH list and analyze how they were treated by LC; 3) to analyze the 'see also' references in the LCSH list; 4) to analyze synonyms; 5) to add these headings into the LEMB master file. Later, she describes that the problems in translation process are differences in syntax and historical and cultural differences. She ends her study analyzing the problems related to the form of headings and the criteria that are applied to resolve those problems.

During the process of reviewing the literature, an announcement was posted in AUTOCAT --the catalogers electronic discussion group-- asking for advice or comments relevant to the use of Spanish subject headings in American libraries. Three responses were received, transcribed in the appendix 3, and, of these, one deserved consideration. This was sent by Vivian Pisano of the Oakland Public Library. She described the procedure followed in assigning Spanish subject headings: 1) to provide a Spanish equivalent for every LCSH heading; 2) to assign the Spanish heading from Bilindex[7] --the bilingual subject heading list issued by the California Spanish Language Data Base--; and 3) if Bilindex showed no Spanish equivalence, to devise a proposed

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[7] Bilindex: A Bilingual Spanish-English Subject Heading List: Spanish Equivalents to Library of Congress Subject Headings, (Oakland, California: California Spanish Language Data Base, 1984).

heading following the structures established in Bilindex. She stated that the main problem was the lack of an established and updated Spanish subject heading list and she would be interested in working with different libraries toward developing a standard list of Spanish subject headings.

CHAPTER III

METHODOLOGY

The first element in the methodology was data gathering. In this part an EPIC search from OCLC was conducted. This search was restricted to books published in the Spanish language with 1992 as date of publication.

These parameters have the following justification: 1) Format. In Mexico, generally speaking, LC cataloging is copied for books. Other formats are processed in a local fashion not using LC records. For Mexican libraries, it is easier to access the NUC or MARCFiche books than the bibliographic utilities for other formats, e.g., NUC Music. 2) Language. Since Spanish is Mexico's official language, most holdings in Mexican libraries are written in the Spanish language. And, 3) Publication Year. It was decided to select 1992 because it represents the most current books published in Spanish.

The search results were downloaded and a print out created of the totality of records. A comparison was made between the subject headings (without subdivisions) assigned by LC and/or by member cataloging and the Escamilla's subject heading list. The subject headings were limited to

topical ones, tag number 650 in the MARC format and subdivisions were eliminated.

The comparison determined the extent of match or type of variations.

The extent of exact match between the subject headings assigned by LC and those that would have been assigned by the Escamilla's list was determined first. Variations which could be generated in the translation process were ignored. These included syntactical variations between English and Spanish (the inverted LCSH heading **ART, MODERN** is not inverted in Spanish **ARTE MODERNO**); a syntactical variation is understood in semiotic sense, i.e., it refers to the order of the elements in a statement. Or, other types of variations between those languages (the direct LCSH heading **HOUSING POLICY** is a prepositional heading in Spanish **POLITICA DE VIVIENDA**). Special case in the exact match option is the following: a) when no plural form exists in Spanish or in English, e.g., the terms **ATLAS** or **ATLASES** are translated as **ATLAS** because there is no plural form in Spanish or **BANKING** can be translated as **OPERACION BANCARIA** or **OPERACIONES BANCARIAS**. For the purpose of this research an exact match is when a semantic equivalence exists between the LCSH heading and the Escamilla's heading, i.e., when the LCSH heading has a direct equivalent and does not include any variation except those like the above which are products of syntactical differences between these languages.

Several different types of variations or near equivalents exist in the Escamilla's list. The following were the near equivalent cases that were taken into account:

a) When the translation creates a heading with subdivisions, e.g., the LCSH heading **INDIAN LITERATURE** has the near equivalent **INDIOS--LITERATURA** while the heading **AZTEC LITERATURE** has the exact match **LITERATURA AZTECA**; if Escamilla were consistent in the subject heading construction process, the heading would have been **AZTECAS--LITERATURA**; in this case, it is assumed that the heading **INDIOS--LITERATURA** and similar ones could have been translated omitting the subdivision without loosing semantic clarity.

b) When the translation changes the quantity of the terms --singular to plural or vice versa--, e.g., the heading **COST AND STANDARD OF LIVING** is translated as **COSTOS Y NIVEL DE VIDA.**

c) When the translation creates a parenthetical qualifier, e.g., **NULLITY** translated as **NULIDAD (DERECHO).**

d) When the translation does not have any near equivalent but a translation can be inferred from a different heading, e.g., **CATALANS** in LCSH and **CATALANES EN MEXICO** in Escamilla or **PHOTOGRAPHERS** and **FOTOGRAFOS FRANCESES.**

e) When the translation adds a new term, e.g., **CITIES** translated as **CIUDADES Y PUEBLOS.**

f) When two different LCSH headings are translated by one Escamilla's heading. e.g., **COOKERY** and **CUISINE** translated as **COCINA.**

g) When one LCSH heading is translated by two more specific Escamilla's headings, e.g., **HEPATITIS** translated as **HEPATITIS INFECCIOSA** and **HEPATITIS VIRAL.**

h) when the translation eliminates elements from the original LCSH heading, e.g., **FOURTH OF JULY CELEBRATIONS** translated as **CUATRO DE JULIO.**

Other case was when the translation changes the meaning of the LCSH heading, e.g., **FREE TRADE** translated as **LIBRE CAMBIO Y PROTECCION.**

In the cases of near equivalence and changed meaning a translation that represents an exact match will be proposed.

The last case was related to the number of headings that did not have either an exact match nor a near equivalent, i.e., how many LCSH headings did not have translation in Escamilla's.

The results of the comparison were presented in three ways:

The total number of bibliographic records with subject headings, including the total percentages of records with topical subject headings, 78%, and with other types of headings, 22.%.

The total number of topical subject headings by type of match, including the total percentages of exact match, 52%;

near equivalent, 8%; changed meaning, 2%; and not found, 38%.

The total number of topical subject headings under near equivalent divided by type of equivalence.

CHAPTER IV

FINDINGS OF THE STUDY

All records which matched the parameters established in the methodology --books in Spanish published in 1992-- were downloaded from the OCLC Online Union Catalog. Some of these records had subject headings in both English and Spanish. The Spanish subject headings were tagged 650 having a 7 as second indicator and a delimiter 2 for the code bidex; this means that those Spanish subject headings were taken from Bilindex*, the bilingual Spanish/English subject heading list published in California. These Spanish subject headings were not taken into account because a comparison between LCSH headings, Escamilla's headings, and the Bilindex's Spanish headings found in OCLC went beyond the objectives of this research; such a comparison can be a topic for a further study. The only subject headings considered were those tagged 650 with a 0 (zero) as a second indicator, meaning topical subject headings based on LC either assigned by LC or by a member cataloging. As

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* Bilindex: A Bilingual Spanish-English Subject Heading List: Spanish Equivalents to Library of Congress Subject Headings, (Oakland, California: California Spanish Language Data Base, 1984).

explained above, no subdivisions were considered in this research.

It was found that 79% (1543) of the bibliographic records had at least one subject headings. Within the 79% of bibliographic records containing subject headings, 78% (1225) had topical subject headings and 22% (318) contained other types of headings or tagged differently (table 1).

Table 1
Total Number of Bibliographic Records w/ Subject Headings

	N	%
Records w/ topical headings	1225	78
Records w/ other types headings	318	22
Total	1543	100

A card was generated for every subject heading. All the cards were alphabetically arranged and 416 duplicates were eliminated. The ratio of topical subject headings per record was 0.748 for the total number of records and 1.05 for the records containing subject headings. A total of 71% (1041) of the subject headings were unique.

Every subject heading was checked against the Escamilla's subject heading list in order to find a possible Spanish equivalent for the heading. The subject headings were then divided into four broad categories: 1) exact match, 2) variation or near equivalent, 3) change in

meaning, and 4) not found. Of the 1041 subject headings 52% (544) had an exact Spanish equivalent, 8% (83) had a near equivalent, 2% (14) change in meaning, and 38% (400) was not found in the Escamilla's list.

Table 2
Topical Subject Headings by Type of Match

	N	%
Found		
Exact match	544	52
Near equivalence	83	8
Changed meaning	14	2
Total (Found)	641	62
Not found	400	38
Total (Both)	1041	100

Further analysis of Table 2 showed that the 8% (83) of the topical subject headings that were under near equivalent could be divided into eight broad categories: subdivided headings, inferred headings, added headings, two headings related to one, one heading becoming two headings, and eliminated headings (table 3).

Subdivided Headings. Of the total topical subject headings that were near equivalent, 59% (49) were Escamilla's subject headings that added a subdivision in order to match the LSCH headings. For instance, **AGRICULTURAL ECOLOGY** translated as **AGRICULTURA--ECOLOGIA**

(Agriculture--Ecology)[9] or **INDIANS, TREATMENT OF** found as **INDIOS--TRATAMIENTO** (Indians--Treatment) or **WAR AND EMERGENCY LEGISLATION** found as **GUERRA Y EMERGENCIA--LEGISLACION** (War and emergency--Legislation).

Quantified Headings. Of the total topical subject headings that were near equivalent, 6% (5) presented changes in the quantity of terms, i.e., the Escamilla's headings changed to singular or plural the original LCSH headings. For instance, **CULTS** found as **CULTO** (Cult) or **SHORT STORY** found as **CUENTOS** (Short stories).

Qualified Headings. Of the total topical subject headings that were near equivalent, 9% (7) presented parenthetical qualifier. These headings added an element in parentheses and this became more specific. Exemplifying the subject headings in this category were **CREATIVE THINKING** found as **PENSAMIENTO CREATIVO (EDUCACION)** (Creative thinking (Education)) or **REPRODUCTION** found as **REPRODUCCION (BIOLOGIA)** (Reproduction (Biology)) or **SOCCER** found as **FUTBOL (SOCCER)** (Football (Soccer)).

Inferred Headings. Of the total topical subject headings that were near equivalent, 6% (5) were found in this category. They were headings found not in a direct way but as part of a more complex heading. There were 5

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[9] Sometimes an English translation is given after the Escamilla's subject heading. This translation intends to illustrate to English speakers the nature of the near equivalent or change in meaning. These translations do not represent or stand for authorized LCSH headings.

headings in this category; for instance, **POPULISM** was found as **POPULISMO EN RUSIA** (Populism in Russia) and **BIBLE STORIES** found as **HISTORIAS BIBLICAS FRANCESAS** (French Bible stories). This finding was important because the Escamilla's list did not indicate, in any way, if one could use the first part of the heading alone; it could be concluded that those headings could only be used in the way in which they appeared in the Escamilla's list, i.e., as complex headings.

Added Terms. Of the total topical subject headings that were near equivalent, 7% (6) added terms. Those were headings that added one term or concept in order to represent the LCSH heading in the Escamilla's list. All the headings, except one, included adding of a term with a conjunction (and); the remaining heading presented a more complex idea. In Escamilla, **ANARCHISM** was found as **ANARQUISMO Y ANARQUISTAS** (Anarchism and anarchists) or **NURSES** was found as **ENFERMERAS Y ENFERMERIA** (Nurses and nursing) or **COMPUTER SIMULATION** was found as **SIMULACION DE COMPUTADORA DIGITAL** (Digital computer simulation).

Two Headings Related to One. Of the total topical subject headings that were near equivalent, 7% (6) were of this type. These headings in LCSH were two different headings, but only one in Escamilla's. For instance, **COOKERY** and **CUISINE** found as **COCINA** (Cookery), **HEALTH** and **HYGIENE** as **HIGIENE** (Hygiene), and **POLITICIANS** and **STATESMEN**

as **ESTADISTAS** (Statesmen).

One Heading Becoming Two Headings. Only one heading (1%) was found in this category. This LCSH heading was two more specific Escamilla's headings. **HEPATITIS** was found as **HEPATITIS INFECCIOSA** (Infectious hepatitis) and **HEPATITIS VIRAL** (Serum hepatitis) in Escamilla.

Eliminated Headings. Of the total topical subject headings that were near equivalent, 5% (4) included headings in which one or more elements were eliminated from the original LCSH headings. This elimination caused a slight change in meaning. For instance, **FORESTS AND FORESTRY** was found as **BOSQUES** and **FORESTRY** disappearing, or **FOURTH OF JULY CELEBRATIONS** was found as **CUATRO DE JULIO** (Fourth of July).

Table 3
Near Equivalences

	N	%
Subdivided headings	49	59
Quantified headings	5	6
Qualified headings	7	9
Inferred headings	5	6
Added headings	6	7
Two headings related to one	6	7
One heading becoming two headings	1	1
Eliminated headings	4	5
Total	83	100

Returning to Table 2 for further examination, 2% (14)

of the headings presented changed meaning. It was possible to establish these variations because, in the Escamilla's list, there were 'see' or 'see from' references from the exact match for these headings to the accepted Escamilla's headings.

These changes meant a significant variation from what was represented in the LCSH headings; for instance, the LCSH heading **FEMINISM** was represented in Escamilla as **MUJERES** (Women) and/or **MUJERES--PROBLEMAS SOCIALES Y MORALES** (Women--Social and moral problems). **ART, MODERN** was represented as **ARTE--HISTORIA--SIGLO XX** (Art--History--20th century) and/or **ARTE MODERNO--SIGLO XX** (Modern art--20th century) and/or **MODERNISMO (ARTE)** (Modernism (Art)). No pattern could be inferred for this category from the cases that were obtained from the sample. Table 4 only shows all the cases found under this category.

Table 4
Changed Meaning

LCSH heading	Escamilla's heading
Art, Modern	Arte--Historia--Siglo XX
	Arte moderno--Siglo XX
	Modernismo (Arte)
Biotechnology	Ingenieria humana (Human engineering)
Bottle feeding	Alimentacion artificial (Artificial feeding)
Child psychology	Nino, Estudio del (Child study)
Christian education	Education religiosa (Religious education)
Criminology	Delitos y delincuentes (Crimes and criminals)
Economic conditions	Historia economica (Economic history)
Father and child	Padres e hijos (Parents and children)
Feminism	Mujeres
	Mujeres--Problemas sociales y morales
Free trade	Libre cambio y proteccion (Free exchange and proteccion)
Immigrants	Emigracion e inmigracion (Emigration and immigration)
Islam	Civilizacion mahometana (Mohammedan civilization)
	Imperio musulmal (Muslim empire)
	Mahometismo (Mohammedanism)
Land use	Planificacion regional (Regional planning)
	Tierras (Land)
Marriage records	Registros de nacimientos, etc. (Birth records, etc.)

As was pointed out previously, 38% (400) of the topical LCSH headings did not have any equivalent in the Escamilla's list. Some patterns could be identified from those instantly.

There were no headings relating to technological or scientific advancements. Thus there were no headings for computer operating systems, software packages, or anything

related to microcomputers, contemporary phenomena, or diseases.

There were no headings for dog breeds, specific types of cats, sharks, birds, fishes, dinosaurs, etc. Only the generic animal names exist and no reference allows the use of the species or more specific terms as exists in LCSH. For instance, under the heading **ZOOLOGY** there is a 'see also' reference that allows the use of "divisions, classes, orders, etc., of the animal kingdom, e.g. Invertebrates; Vertebrates; Birds; Insects; Mammals; Cetacea; Ungulata; and particular animals, e.g. Antelopes; Buffalos; Squirrels; Tigers; and headings beginning with the word Animal."[10]

There were only a few headings relating to women. There were no headings for women as authors, novelists, or priests; or women in politics, literature, etc.

There were no headings for self-'something', i.e., self-actualization, -defense, -esteem, -perception, or -reliance.

Some of these gaps could be explained because the Escamilla's list was old, last publication in 1978, while others, like dog breeds, had no possible explanation.

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[10] Library of Congress, Library of Congress Subject Headings, 11th ed., (Washington, D.C.: Library of Congress, Cataloging Distribution Service, 1988).

CHAPTER V

PROPOSED TRANSLATIONS

This list offers new translations that the author would have interpreted as an exact match for those headings representing 8% of near equivalent and 2% of change in meaning; each part has a special arrangement. The headings are arranged alphabetically under LCSH heading. This proposal does not imply that the Escamilla's subject headings will change; this only displays what headings would have to be added for exact match to occur.

HEADINGS UNDER NEAR EQUIVALENT

LCSH	Escamilla	Proposed Heading
Agricultural ecology	Agricultura--Ecologia	Ecologia agricola
Agricultural productivity	Agricultura--Produccion	Produccion agricola
Agricultural research	Agricultura--Invstigacion	Investigacion agricola
Anarchism	Anarquismo y anarquistas	Anarquismo
Art patronage	Arte--Patrocinio	Patrocinio artistico
Bible stories	Historias biblicas	Historias biblicas Francesas
Catalans	Catalanes en Mexico	Catalanes

Cement industries	Cemento--Industrias	Industrias cementeras
Child rearing	Nino--Cuidado e higiene	Cuidado infantil
Civil procedure	Procedimientos civiles	Procedimiento civil
Comic books, strips, etc.	Historietas comicas	Libros, tiras comicas, etc.
Computer simulation	Simulacion de computadora	Simulacion por computadora digital
Cookery	Cocina	Cocina
Cost and standard of living	Costos y nivel de vida	Costo y nivel de vida
Creative thinking	Pensamiento creativo (Educacion)	Pensamiento creativo
Criminal justice, Administration of	Justicia penal--Administracion	Administracion de justicia penal
Criminal procedure	Procedimientos penales	Procedimiento penal
Cuisine	Cocina	Alta cocina
Cults	Culto	Cultos
Draft	Reclutamiento y enlistamiento	Reclutamiento
Dramatic criticism	Drama--Historia y critica	Critica dramatica
Drug abuse	Drogas--Abuso	Abuso de drogas
Educational planning	Educacion--Planeamiento	Planeacion educativa
Electric power production	Energia electrica--Produccion	Produccion de energia electrica
Employees, Training of	Empleados--Capacitacion	Capacitacion de empleados
Encyclopedias and dictionaries, Spanish	Enciclopedias y diccionarios--Espanol	Enciclopedias y diccionarios espanoles

Family life education	Vida familiar--Educacion	Educacion para la vida familiar
Family life surveys	Vida familiar--Estudios	Estudios sobre vida familiar
Fire extinction	Fuego--Extincion	Extincion de fuego
Food habits	Alimentos--Habitos	Habitos alimenticios
Food handling	Alimentos--Manejo	Manejo de alimentos
Forests and forestry	Bosques	Bosques y silvicultura
Fourth of July Celebrations	Cuatro de julio	Celebracions del cuatro de julio
Frontier and pioneer	Frontera y exploradores --Vida	Frontera y pioneros
Gas industry	Gas--Industria	Industria qasera
Government ownership	Gobierno--Propiedades	Propiedades qubernamentales
Government, Resistance to	Gobierno--Resistencia gobierno	Resistencia al
Health	Higiene	Salud
Hepatitis	Hepatitis infecciosa Hepatitis viral	Hepatitis
Home buying	Casas--Compra	Compra de casas
Hygiene	Higiene	Higiene
Indian literature	Indios--Literatura	Literatura indigena
Indians, Treatment of	Indios--Tratamiento	Tratamiento a los indios
Industrial laws and legislation	Industrias--Leyes y legislacion	Leyes y legislacion industriales
Insurance laws	Seguros--Leyes y legislacion	Leyes de seguros
Interest	Interes y usura	Interes

Labor laws and legislation	Trabajo--Leyes y legislacion	Leyes y legislacion laborales
Labor market	Trabajo--Oferta	Mercado de Trabajo
Motion picture actors and actresses	Cinematografia--Actores y actrices	Actores y actrices cinematrograficos
Motion picture producers and directors	Cinematografia--Produccion y direccion	Productores y directores cinematrograficos
Mushroom culture	Setas--Cultivo	Cultivo de setas
Marranos	Marranos (Judios)	Marranos
Narcotic laws	Narcoticos--Leyes	Leyes de narcoticos
Nature conservation	Naturaleza--Conservacion	Conservacion de la naturaleza
Nurses	Enfermeras y enfermeria	Enfermeras
Orphans	Huerfanos y orfanatorios	Huerfanos
Paint industry and trade	Pintura--Industria	Industria y comercio de la pintura
Peasant uprisings	Campesinos--Insurrecciones	Insurrecciones campesinas
Personal management	Personal--Direccion	Administracion de personal
Petroleum industry and trade	Petroleo--Industria y comercio	Industria y comercio petrolero
Petroleum products	Petroleo--Productos	Productos del petroleo
Photographers	Fotografos franceses	Fotografos
Plant propagation	Plantas--Propagacion	Propagacion de plantas
Politicians	Estadistas	Politicos
Popular music	Musica popular (Canciones, etc.)	Musica popular
Populism	Populismo en Rusia	Populismo

Production management	Produccion--Administracion	Administracion de la produccion
Public opinion polls	Opinion publica--Encuestas	Encuestas de opinion publica
Reproduction	Reproduccion (Biologia)	Reproduccion
Retirement	Retiro (Jubilacion)	Retiro
Rubber industry and trade	Plasticos--Industria y comercio	Industria y comercio del plastico
Short story	Cuentos	Cuento
Smoking	Fumar (Habito)	Habito de fumar
Soap trade	Jabon--Comercio	Comercio del jabon
Soccer	Futbol (Soccer)	Futbol
Statesmen	Estadistas	Estadistas
Study, Method of	Estudio--Metodo	Metodo de estudio
Television programs	Television--Programas	Programas de television
Thought and thinking	Pensamiento	Pensamiento y pensar
Trade regulation	Comercio--Control	Control del comercio
Traffic regulation	Transito--Reglamentos	Reglamento de transito
War and emergency legislation	Guerra y emergencia--Legislacion	Legislacion de guerra y emergencia
Women's rights	Mujeres--Derechos	Derechos de la mujer

HEADINGS UNDER CHANGED MEANING

LCSH	Escamilla	Proposed Heading
Art, Modern	Arte--Historia--Siglo XX Arte moderno--Siglo XX Modernismo (Arte)	Arte moderno
Biotechnology	Ingenieria humana	Biotecnologia
Bottle feeding	Alimentacion artificial	Alimentacion por biberon
Child psychology	Nino, Estudio del	Psicologia infantil
Christian education	Educacion religiosa	Educacion cristiana
Criminology	Delitos y delincuentes	Criminologia
Economic conditions	Historia economica	Condiciones economicas
Father and child	Padres e hijos	Padre e hijo
Feminism	Mujeres Mujeres--Problemas sociales y morales	Feminismo
Free trade	Libre cambio y proteccion	Libre comercio
Immigrants	Emigracion e inmigracion	Inmigrantes
Islam	Civilizacion mahometana Imperio musulman Mahometismo	Islam
Land use	Planificacion regional Tierras	Uso de tierras
Marriage records	Registros de nacimientos, etc.	Registros de matrimonios

CHAPTER VI

CONCLUSIONS

The findings of the study showed that of the 1947 bibliographic records downloaded from the OCLC Online Union Catalog that related to books in Spanish published in 1992, 79% (1543) had at least one subject heading, of those bibliographic records 78% (1225) were topical subject headings, and of those topical subject headings 71% (1041) were unique subject headings. The comparison between the LCSH headings and the Escamilla's list showed that 60% of the LCSH headings were found either as an exact match or as a near equivalent in the Escamilla's list, 2% represented changed meaning, and 38% were not found. The 60% of the topical LCSH headings found in the Escamilla's list was high if one consider that the most recent edition of Escamilla was released in 1978.

The match rate was high when LCSH headings implied common aspects of everyday life or western civilization, e.g., headings related to law, literature, philosophy, art, history, etc. In addition, the Escamilla's list responded to specific Mexican cultural and social needs. This strength of the Escamilla's list was pointed out by Cabello-

Argandona, Crary, and Pisano[11] when they said that the Escamilla's list reflected Mexican bias.

Escamilla's introductory note did not describe how many headings were in the list or what type of headings were included, i.e., topical headings, personal names, corporate names, etc. The Escamilla's list had strong limitations in subject headings representing new technologies and theories, in particular subject fields that have seen rapid development since 1978.

The author recommends that the Escamilla's list must be updated since it is the only subject heading list published in Mexico. This process should include the revision of all those headings not already in the list, even dog breeds. In addition, the updating should be done on a regular basis, i.e., the list should show the topics that are appearing in the libraries' holdings and, in this way, help patrons looking for information in library catalogs. This process should be a cooperative one between the major Mexican libraries and, possibly, with the participation of libraries and librarians who serve Spanish speaking population in the United States. The need for cooperation between Spanish speaking libraries and American ones increases everyday. An

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[11] Roberto Cabello-Argandona, Eleanor R. Crary, and Vivian M. Pisano, "Subject Access for Hispanic Library Users," Library Journal 107, no. 4 (August 1982): 1384.

attempt to meet this need is OCLC's announcement in November[12] 1992 of an expansion of its CAT CD-450 off-line cataloging system to include a CD-ROM subset of just Hispanic records, 1.2 million records at the beginning. This sort of product encourages joint efforts in subject cataloging. Bilingual subject cataloging between Spanish speaking countries and the U.S. will make more likely the incorporation of Mexican librarianship into the international bibliographic arena.

Further research should be done conducted to determine to what extent Mexican libraries are using the Escamilla's list, how those libraries would benefit in their subject cataloging process if an updated edition of the list were published, and which organizations or group of individuals might participate in that updating process.

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[12] "OCLC Expands CAT CD450 Medical Set and Introduces Hispanic Collection," OCLC Newsletter no. 20 (November/December 1992): 3; and "OCLC Hispanic Collection Cataloging System on CD-ROM," Library Hotline 21, no. 44 (November 2, 1992): 5.

APPENDIX 1

TOTAL NUMBER OF UNIQUE SUBJECT HEADINGS BY LETTER

	Match	Near Equivalent	Change Meaning	Not Found	Total
A	50	5	1	22	78
B	26	1	2	13	42
C	77	13	3	52	145
D	19	3	-	10	32
E	36	4	1	29	70
F	30	8	3	22	63
G	11	3	-	18	32
H	20	4	-	14	38
I	24	5	2	21	52
J	3	-	-	3	6
K	3	-	-	-	3
L	24	2	1	13	40
M	43	4	1	22	70
N	14	3	-	6	23
O	6	1	-	7	14
P	46	12	-	36	94
Q	1	-	-	5	6
R	17	3	-	14	34
S	46	6	-	42	94
T	22	4	-	19	45
U	6	-	-	3	9
V	5	-	-	6	11
W	13	2	-	21	36
X	-	-	-	-	-
Y	1	-	-	1	2
Z	1	-	-	1	2
Total	544	83	14	400	1041

APPENDIX 2

TOTAL PERCENTAGE BY LETTER

	% Match	% Near Equivalent	% Changed Meaning	% Not Found	Total
A	64	7	1	28	100
B	62	2	5	31	100
C	53	9	2	36	100
D	59	9	-	32	100
E	51	6	1	42	100
F	48	13	5	34	100
G	34	9	-	57	100
H	53	10	-	37	100
I	46	10	4	40	100
J	50	-	-	50	100
K	100	-	-	-	100
L	60	5	3	32	100
M	61	6	2	31	100
N	61	13	-	26	100
O	43	7	-	50	100
P	49	13	-	38	100
Q	17	-	-	83	100
R	50	9	-	41	100
S	49	6	-	45	100
T	49	9	-	42	100
U	67	-	-	33	100
V	45	-	-	55	100
W	36	6	-	58	100
X	-	-	-	-	-
Y	50	-	-	50	100
Z	50	-	-	50	100
Total	**52**	**8**	**2**	**38**	**100**

APPENDIX 3

MESSAGE POSTED IN AUTOCAT WITH ANSWERS

A message was posted in AUTOCAT asking for recommendations and/or advice regarding this research. The following is the text of that message:

* * * Top of File * * *
Date: Wed. 09 Sep 92 08:00:17 EDT
From: Amey Park <APARK@KENTVM>
Subject: Subject heading lists in Spanish
To: autocat@uvmvm

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A library school student at Kent asked me to post this question to the list. I will sēnd any responses to him. Thanks in advance.

My name is Fernando Alvarez. I worked in Technical Services in an academic library in Mexico City for ten years. During that time, I worked as a cataloger and was then promoted to head of the department. I am currently working towards my Master's degree in Library and Information Science at Kent State University. I want to do research comparing the subject heading lists most widely used in Mexican libraries. The purpose of the study is to determine how Mexican libraries are handling the lack of a current subject heading list. In addition to this purpose, the study has the following objectives: a) to determine if the only subject heading list published in Mexico is still being used; b) to determine which list or lists are used instead of or for complementing that list; and c) to analyze the four most widely used lists and to determine the extent of variation between them.

1) Could you describe the procedure <use of subject heading list in Spanish, free translation of LCSH, etc.> you follow if you assign subject headings in Spanish in your subject cataloging process?

2) Do you have additional recommendations for me for the realization of this research?

3) Do you have any suggestions for me if the libraries I survey do not responde?

Thank you, Fernando Alvarez

Please send any respond to:
Amey Park Kent State University
apark@kentvm
* * * End of File * * *

The following are the responses received to the message posted in autocat. The messages are transcribed verbatim.

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Received: from OHSTVMA.ACS.OHIO-STATE.EDU by KENTVM.BITNET (Mailer R2.08) with BSMTP id 0061: Thu, 10 Sep 92 09:51:24 EDT
Received: by OHSTVMA (Mailer R2.08 R208004) id 1891; Thu, 10 Sep 92 09:49:40 EDT
Date: Thu, 10 Sep 1992 08:35:20 CDT

In reply to the student from Mexico, from 1976 to 1978 Northwestern University hosted a project funded by the Venezuelan government to bring under bibliographic control all the items about Venezuela or by Venezuelans. Spanish subject headings were assigned. The person who would know most about these headings is Oscar Delepiani, cataloger in the Benson Collection of Latin American materials at the Library at the University of Texas, Austin. Oscar was employed as a cataloger with the "Venezuela Project" here at NU.

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Received: from VM.USC.EDU by KENTVM.BITNET (Mailer R2.08) with BSMTP id 3467; Fri, 11 Sep 92 14:19:08 EDT
Received: from USCVM (CALIMANO) by VM.USC.EDU (Mailer R2.08) with BSMTP id 6323; Fri, 11 Sep 92 11:17:09 PDT
Date: Fri, 11 Sep 92 11:00:45 PDT

For Fernando Alvarez

Fernando, me imagino que las 4 listas son la de Escamilla, la de Rovira de la OEA, la nueva de Colombia, y Bilindex. Tambien Rovira tradujo Sears al espanol y lo publico la HW Wilson. Con las que mas he trabajado ha sido las de Rovira (OEA) cuando estuve en Puerto Rico y luego con Bilindex. Tambien he usado las de Colombia pues acabo de regresar de El Salvador donde la estan usando. Si tienes alguna pregunta en particular sobre el uso de epigrafes en espanol, o sus aplicaciones o como trabajamos cuando no hay epigrafes correspondientes, dejamelo saber. Me interesa mucho tu tema pues es una area que siempre ha necesitado investigacion, y mas en espanol.

Now, you asked 3 questions that I will try to answer below...

1. En el proyecto de la Bibliografia [Na]cional Salvadorena, decidimos usar los epigrafes del Congreso con sus respectivos equivalentes en espanol. Para ello usamos la lista de Colombia como la lista basica y Bilindex como lista secundaria. Personalmente traduje y adapte los "free/floaters" o subdivisiones comunes de LCSH para temas generales y para aquellos bajo nombres geograficos. Cuando encontrabamos un epigrafe en ingles que no tenia equivalente, se lo asignabamos localmente y haciamos una ficha para nuestro catalogo de autoridades de materia. Tratamos de seguir el patron de LEMB (= Lista de encabezamientos de materia de Colombia). Usabamos terminologia del libro y/o cotejabamos algun diccionario especializado o una enciclopedia general en espanol.

2. Recomendaciones adicionales para tu investigacion, necesito mas info sobre que es lo que vas a hacer. Veo que preguntas si la unica lista que se usa en Mexico es la de Escamilla. De ello no podria saber pues no conozco la situacion en Mexico. Pero si te puedo decir que LEMB es ampliamente usado en El Salvador como lista basica.

3. Cualquier encuesta que llevamos a cabo, vamos a tener algunas respuestas y otros se van a negar a llenar un cuestionario por cualesquiera razon. Depende del porcentaje de respuestas es que debes proceder a enviar una nota personal pidiendo la informacion que necesitas.

Bueno, espero poder ser de mas ayuda. Estoy a tu disposicion para cualquier cosa. Suerte en tu investigacion.

Atentatmente

Ivan E. Calimano

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Received: from OHSTVMA.ACS.OHIO-STATE.EDU by KENTVM.BITNET
(Mailer R2.08) with BSMTP id 8374; Sun, 20 Sep 92
18:14:36 EDT
Received: by OHSTVMA (Mailer R2.08 R208004) id 6735; Sun, 20
Sep 92 18:12:54 EDT
Date: Sun, 20 Sep 1992 14:54:07 PDT

This is in reply to Fernando Alvarez's request for information on Spanish subject headings.

The Oakland Public Library uses Bilindex, issued by the California Spanish Language Data Base in 1984, and its supplements issued in 1986 and 1992. These are available from Floricanto Press, P.O. Box 4273, Berkeley, CA 94704. Bilindex shows Spanish language equivalents to library of Congress subject headings and includes an English to Spanish index (except the latest supplement).

Our procedure for assigning Spanish subjects is as follows:

1. Provide a Spanish equivalent for every LCSH unless the subjects are identical;
2. Assign the Spanish subject from Bilindex (MARC coding for the 6xx field is 7 for the second indicator and bidex in subfield 2);
3. If Bilindex shows no Spanish subject, devise a proposed heading following the structures established in Bilindex. The proposed headings are then reviewed, changed if necessary, and established by an internal review process.

For those of us who add Spanish subject headings to cataloging records (and I know that there are several libraries in California, and throughout the U.S.) our problem is the lack of an established, supported and updated list of Spanish language subject headings. Bilindex is outdated and the supplements are too few and far in between to be of real use to the library community.

I would be interested in the results of your research. I would also like to hear from libraries that provide Spanish subjects, what procedures they follow, what problems they encounter, and if they would be interested in working toward developing a standard list of Spanish subjects.

Vivian Pisano
oakplpis@class.org

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